

Plants of *Viola pubescens*, described by Aiton in 1789, are decidedly pubescent, with strongly veined thickish leaves with ovate stipules, the basal leaves usually absent at flowering time, and seeds 2.6-3 mm. long. The other species of this pair, described by Schweinitz in 1822 from North Carolina as *V. eriocarpa*, is nearly glabrous, with thinner, less conspicuously veiny leaves, and somewhat narrower stipules, the basal leaves usually present at flowering time, and smaller seeds about 2-2.6 mm. long.

In 1941 an attempt was made (*Rhodora* 43: 616-617) to displace the name *V. eriocarpa* in favor of *V. pensylvanica* Michx. An argument was presented that a photograph of the original material of Michaux's *V. pensylvanica* shows a mixture of *V. pubescens* and of *V. eriocarpa*, the former represented by very immature plants scarcely in bloom, the latter by a plant with well-grown foliage and an old flower. The author concludes that the latter stands as the type of the Michaux name. When we turn, however, to the original description we find the statement "V [iola] tota villosopubescent": the conclusion seems inescapable that the plant described is *V. pubescens* Ait. According to Recommendation 8C (Int. Code, 1956), whenever type material of a taxon is heterogeneous, the lectotype should be so selected as to preserve current usage unless another element agrees better with the original description and (or) figure, and in Appendix IV, paragraph 4, "The original description of the taxon concerned should be the basic guide."

That part of the original material of *Viola pensylvanica* that agrees with the original description in Michaux's *Flora Boreali-Americana* 2:149 (1803) is designated as the lectotype, and *V. pensylvanica* is clearly a synonym of *V. pubescens*. — GEORGE NEVILLE JONES, UNIVERSITY OF ILLINOIS.

THE TYPE OF *SETARIA FABERII*. — The majority of plant taxonomists regard *Setaria faberii* Herrmann as a distinct species. A noteworthy exception is H. A. Gleason. In December, 1953 he wrote to me "I frankly can not see *S. faberii* as a good species. To me it is just another race of *S. viridis*, to be recognized possibly as a variety, or a form, or what you please, but to me it is not a species." The absence of the taxon from his *New Illustrated*

Flora was no oversight but the result of courageous deliberate exclusion. David E. Fairbrothers (*Brittonia* 11: 44-48. 1959) has brought the full force of his attention to the subject of morphological variation of *S. faberii* and *S. viridis*. After measurements and observation of numerous plants both from wild populations and cultivation he defined comparative sizes in the spikelets, panicles and bristles for the two species, which he set in a key, and furthermore concluded that: "The one stable qualitative feature was the strigose condition of the upper surface of the blades of *S. faberii* in contrast to the glabrous or glabrate condition present in *S. viridis*." Although Dr. Fairbrothers did not definitely state whether he accepts *S. faberii* in the specific category, his treatment would seem to suggest so. The investigator did not study the species on a world-wide basis; he apparently consulted few herbaria, and did not examine the type of *S. faberii*. Because of the latter omission there arises a peculiar situation regarding "the one stable" feature, leaf-pilosity, a dilemma which will be discussed below. The principal purpose of the present note is to indicate the problem of pilosity of the leaf-blades of *S. faberii* especially in the light of the type of the species.

For several years I have given some cursory attention to *S. faberii*. The species grew in vast quantities, almost like a cultivated crop, on the grounds in the rear of the Museum Building of The New York Botanical Garden. A specimen (Monachino #582) was sent to Jason R. Swallen in October, 1953, who confirmed the identification and asserted that he considered *S. faberii* "a good species." This collection has hairy leaf blades. The pilosity on the upperside of the leaf blades of *S. faberii* is easily observable; it can be clearly seen, and even felt by merely running the fingers lightly over the surface of the blade. The very ease with which this character is employed (I suspect) has sometimes prejudiced my identification in doubtful cases. It is thus that I refrain from naming another of my collection from The New York Botanical Garden grounds (Monachino #583, Sept. 1956), notwithstanding that measurements would key it out to *S. faberii* and that it was growing in a population

of *S. faberii* and simulating that species. The spikelets of my #583 are over 2.5 mm. long, the length of the panicle is up to 10 cm. and its width up to 8 mm.; the sterile lemma of the spikelet manifestly surpasses the second glume. The maxima given for *S. viridis* by Fairbrothers are 2.2 mm., 9.5 cm. and 0.7 cm., respectively; sterile lemma length ratio to 2nd glume 0.95 to 1.06. The leaf blades of #583 are glabrous and so it lacks Fairbrothers' one stable qualitative feature conveniently characterizing *S. faberii*.

My specimen #583 is not the only one in the herbarium of The New York Botanical Garden with glabrous blades and with measurements surpassing those given for *S. viridis*. A Chinese collection distributed as *S. viridis* is another example: *Steward Chiao & Cheo 220*, Kweichow Province, Liang Feng Yah, Tsunyi Hsien, 6 Aug. 1931. Fernald in the 8th edition Grays' Manual describes the spikelets of *S. viridis* up to 2.5 mm. long.

As to the constancy of leaf-strigosity of *S. faberii*, Fernald said "usually", and I have examined plants having lower leaves manifestly pilose while the upper ones were glabrous. But the most disconcerting problem concerning pilosity is posed by the very type of *S. faberii*.

In the original description of *S. faberii*, Herrmann (Beitr. Biol. Pfl. 10; 51. 1910) described the leaves glabrous above: "laminis utrimque glabris, supra scabris." The type was collected in China, Szech-uen, Faber No. 582-1182, and at Vienna. A specimen of Faber 1182, possibly an isotype, is found amongst specimens of *S. viridis* in the herbarium of The New York Botanical Garden, has glabrous blades. Through the kindness of Karl H. Rechinger, Naturhistorisches Museum, Wien, I obtained a portion of a leaf from the type and this too is glabrous! Apparently the type lacks the very feature named constant for the species!

It is thus seen that the problem centering on *S. viridis* - *S. faberii* is a complex one indeed, at least regarding pubescence. How is one to harmonize Fairbrothers' conclusion concerning leaf-pilosity with the type of *S. faberii*? Dr. Fairbrothers, who has read this paper in manuscript, provides part of the answer him-

self. He wrote to me (letter of 27 April 1959): "Since my *Setaria* paper appeared in Brittonia specimens have been sent to me by taxonomists from three different states in which the five quantitative characteristics fit *faberii*, but the leaves were glabrous. Each person indicated they found only one or two plants of the glabrous type in a population of hairy ones." — JOSEPH MONACHINO, NEW YORK BOTANICAL GARDEN.

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AN INTERPRETATION OF TWO FORMS  
OF *OSMUNDA CINNAMOMEA*

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Within the range of Gray's Manual, six aberrant forms of the cinnamon fern, *Osmunda cinnamomea* L., have been described, in addition to the typical form and the well defined var. *glandulosa* Waters. Other varieties are also known from tropical and sub-tropical America and from eastern Asia. The writer and several of his colleagues have been interested in this species for over ten years as a remarkably fine subject for morphogenetic studies. During this period many observations have been made on plants growing under natural conditions in the vicinity of Boston, Massachusetts, and certain tagged plants have been examined in successive growing seasons. These studies have made it possible to offer at least partial explanations for two of the described forms, forma *frondosa* (T. & G.) Britt., and forma *latipinnula* Blake.

*O. cinnamomea*, f. *frondosa* was first described as a variety by Torrey and Gray (Torrey, 1840), and later reduced to a form by Britton (1890). In contrast to the typical condition in which fertile fronds are completely distinct from foliage fronds and are without laminar development, this form is characterized by reproductive fronds which bear some laminar tissue. In fact, sterile pinnae may predominate, with only a few sporangia-bearing leaflets present. The fertile and sterile pinnae are variously intermixed; and sometimes sporangia may even be born on the edges or backs of leafy pinnae. In the writer's own observations, the sterile pinnae have been basally located and have given way, with various intermediates, to fertile pinnae in